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PRELIMINARY AMENDMENT

National Stage Entry of PCT/JP03/08477

Attorney Docket No.: Q85551

**AMENDMENTS TO THE CLAIMS** 

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (original): A pulse wave propagation detection system comprising

electrocardiographic signal detection means, and eyeground image detection means for detecting

an eyeground image in synchronization with an electrocardiographic signal detected through the

detection means, which system detects pulse wave propagation through an intracerebral blood

vessel on the basis of a change in the diameter of an eyeground vein, the diameter being

measured by use of an eyeground image synchronized with an arbitrary electrocardiographic

signal.

2. (original): A pulse wave propagation detection system comprising

electrocardiographic signal detection means, and eyeground image detection means for detecting

an eyeground image in synchronization with an electrocardiographic signal detected through the

detection means, which system detects the state of sclerosis of a capillary artery by detecting

pulse wave propagation through the artery on the basis of a change in the diameter of an

eyeground vein, the diameter being measured by use of an eyeground image synchronized with

an arbitrary electrocardiographic signal.

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3. (currently amended): A pulse wave propagation detection system according to claim

1 or 2, wherein the change in the eyeground vein diameter is a change in the diameter of an

eyeground vein at the optic papilla.

4. (currently amended): A pulse wave propagation detection system according to any of

claims 1 through 3 claim 1, wherein the change in the eyeground vein diameter is the difference

between the diameter of an eyeground vein as measured on the basis of an eyeground image

synchronized with an R wave, which is an electrocardiographic signal, and the diameter of the

eyeground vein as measured on the basis of an eyeground image synchronized with a T wave,

which is an electrocardiographic signal.

5. (currently amended): A pulse wave propagation detection system according to any of

claims 1 through 4 claim 1, wherein detection of an eyeground image is performed by use of

software which can provide an eyeground image synchronized with an electrocardiographic

signal by extracting, on a computer display, a stationary eyeground image synchronized with an

arbitrary electrocardiographic signal from a motion eyeground image.

6. (original): A pulse wave propagation detection system according to claim 5, wherein

the software which can provide an eyeground image synchronized with an electrocardiographic

signal is software which enables extraction of a stationary eyeground image synchronized with

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an arbitrary electrocardiographic signal while displaying a motion eyeground image and an

electrocardiogram on display means of a computer terminal.

7. (currently amended): A pulse wave propagation detection system according to claim

5 or 6, wherein the software includes a program for executing means for calculating a change in

the diameter of an eyeground vein on the basis of the eyeground image synchronized with an

arbitrary electrocardiographic signal.

8. (original): A pulse wave propagation detection system according to claim 7, wherein

the software includes a program for executing means for correlating the change in the eyeground

vein diameter with pulse wave propagation through an intracerebral blood vessel, thereby

detecting the pulse wave propagation.

9. (original): A pulse wave propagation detection system according to claim 7, wherein

the software includes a program for executing means for correlating the change in the eyeground

vein diameter with sclerosis of a capillary artery, thereby detecting the state of sclerosis of the

capillary artery.

10. (currently amended): A computer program comprising an algorithm for executing

software employed for implementing a pulse wave propagation detection system as recited in

any of claims 5-through 8 claim 5.

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11. (original): An electronic medium containing software which is executed by means of

a computer program as recited in claim 10.

12. (new): A pulse wave propagation detection system according to claim 2, wherein the

change in the eyeground vein diameter is a change in the diameter of an eyeground vein at the

optic papilla.

13. (new): A pulse wave propagation detection system according to claim 2, wherein the

change in the eyeground vein diameter is the difference between the diameter of an eyeground

vein as measured on the basis of an eyeground image synchronized with an R wave, which is an

electrocardiographic signal, and the diameter of the eyeground vein as measured on the basis of

an eyeground image synchronized with a T wave, which is an electrocardiographic signal.

14. (new): A pulse wave propagation detection system according to claim 2, wherein

detection of an eyeground image is performed by use of software which can provide an

eyeground image synchronized with an electrocardiographic signal by extracting, on a computer

display, a stationary eyeground image synchronized with an arbitrary electrocardiographic signal

from a motion eyeground image.

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15. (new): A pulse wave propagation detection system according to claim 14, wherein

the software which can provide an eyeground image synchronized with an electrocardiographic

signal is software which enables extraction of a stationary eyeground image synchronized with

an arbitrary electrocardiographic signal while displaying a motion eyeground image and an

electrocardiogram on display means of a computer terminal.

16. (new): A pulse wave propagation detection system according to claim 14 wherein

the software includes a program for executing means for calculating a change in the diameter of

an eyeground vein on the basis of the eyeground image synchronized with an arbitrary

electrocardiographic signal.

17. (new): A pulse wave propagation detection system according to claim 16, wherein

the software includes a program for executing means for correlating the change in the eyeground

vein diameter with pulse wave propagation through an intracerebral blood vessel, thereby

detecting the pulse wave propagation.

18. (new): A pulse wave propagation detection system according to claim 16, wherein

the software includes a program for executing means for correlating the change in the eyeground

vein diameter with sclerosis of a capillary artery, thereby detecting the state of sclerosis of the

capillary artery.

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19. (new): A computer program comprising an algorithm for executing software employed for implementing a pulse wave propagation detection system as recited in claim 14.

20. (new): An electronic medium containing software which is executed by means of a computer program as recited in claim 19.